

Patent claims

I claim:

1. A hand-operated chopper (1) for cutting up ice, with a housing (2, 3) able to be pushed over the goods to be cut up and with an arbour (11) which is guided in a housing upper part (2) and which may be displaced downwards against the force of a spring (14) by way of an actuating mechanism (4) with a push button (17), characterised in that the arbour (11) at its lower end carries a knife (5) provided with a toothed cutter (52).
2. A chopper (1) according to claim 1, characterised in that the housing upper part is detachably connectable to a beaker-like housing lower part (3) closed at the bottom.
3. A chopper (1) according to claim 2, characterised in that a height H_K of the blade (51), a height H_B of the beaker (5) and a maximal vertical path of the knife (5) limited by the actuating mechanism (4) are selected and matched to one another such that the cutter (52) in its lowermost position does not come into contact with a beaker base (31) so that in this lowermost knife position there exists an air gap H_S between the downwardly directed tips of the teeth (53) of the cutter (52) and the beaker base (31).
4. A chopper (1) according to one of the claims 1 to 3, characterised in that the teeth (53, 53') of the knife (5) are ground on one or both sides, wherein the cutting angle (γ, γ') is selected between 30 and 100°, preferably at 90° for those ground on both sides and 45° for those ground on one side.
5. A chopper (1) according to claim 1 to 4, characterised in that the teeth (53) are either i) alternately bent laterally out of the vertical plane of a blade (51) of the knife (5), or ii) are bent out of the vertical plane of the blade sheet [metal] twisted about their vertical axis, so that the tips of the teeth (53) essentially still lie in the plane and due to this reinforce the breaking-apart effect on chopping.

6. A chopper (1) according to one of the preceding claims 1 to 5, characterised in that the beaker (3) given a removed chopper upper part (2) may be detachably connected to a shaker attachment [top] (8) in an essentially fluid-tight manner.
7. A chopper (1) according to claim 6, characterised in that the beaker (3) widens towards the top at an angle α and the attachment [top] (8) comprises a sidewall (81) which tapers downwards at an angle β and which towards the top merges into a cone (82), and that the diameter of the upper beaker region and of lower attachment [top] wall are matched to one another such that the attachment [top] may be inserted into the beaker approximately up to the transition of the wall (81) into the cone (82) and by way of this an adequate sealing of fluids to the beaker is achieved.
8. A chopper according to claim 7, characterised in that the angles α and β are between 1 and 15°, preferably 4°.
9. A chopper (1) according to one of the preceding claims 1 to 8, characterised in that it comprises an underlay (7) adapted to the beaker (3), preferably of a soft anti-slip elastomer such as silicone.
10. A chopper (1) according to claim 9, characterised in that the underlay (7) comprises a peripherally thickened circumferential edge bead (71).